

## ABSTRACT OF THE DISCLOSURE

There is provided a vacuum control system for allowing the degree of vacuum in a vacuum vessel to be kept constant, effectively and accurately removing vaporized components degassed into the vacuum vessel through a gas permeation diaphragm by stably introducing a very small amount of air into a vacuum exhaust path, and thus operating stably, and a vacuum degassing apparatus employing the vacuum control system. The vacuum control system controls the rotatory power of a DC brushless motor, continuously controls displacement of a vacuum pump, and thus keeps the degree of vacuum in a vacuum vessel constant, by decompressing the inside of the vacuum vessel using an exhaust vacuum pump which operates with the DC brushless motor, monitoring the inside pressure of the vacuum vessel using a pressure sensor, and controlling a voltage applied to the DC brushless motor on the basis of an output signal resulting from measurement of the inside pressure of the vacuum vessel by the pressure sensor.